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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,746	09/10/2003	Oliver Horn	008388-7	3402
22204	7590	08/29/2005	EXAMINER	
NIXON PEABODY, LLP 401 9TH STREET, NW SUITE 900 WASHINGTON, DC 20004-2128			FORD, JOHN K	
			ART UNIT	PAPER NUMBER
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DATE MAILED: 08/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

8

Office Action Summary	Application No. 10/658,746	Applicant(s) HORN ET AL.	
	Examiner John K. Ford	Art Unit 3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/29/05
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 4-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3, 10-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Applicant's response of July 29, 2005 has been carefully considered. Applicant's previous election of the species of figure 1, without traverse, is acknowledged. Applicant has identified claims 1-3 and 10-12 as readable on figure 1 and affirms that in the remarks section of his July 29, 2005 response. It is noted however that claim 2 in the July 29, 2005 amendment was designated "(withdrawn)" and that is taken to be a typographical error. That claim is treated on the merits here. Likewise, claims 4 and 5 which should have been designated as withdrawn (consistent with applicant's original election and affirmation here) are likewise typographically improperly designated and are withdrawn here. Applicant acknowledges that the published Herta application that the Examiner relies upon corresponds to the German reference mentioned in the specification. Because it is in the English language, the Examiner prefers to rely on it rather than the German equivalent, as the Examiner has no working knowledge of German.

In an attempt to distinguish amended claim 1 from the prior art relied upon by the Examiner, applicant stresses the operating modes that his device is capable of (see last paragraph of claim 1). This is generally not availing in distinguishing an apparatus claim from prior art that teaches the claimed apparatus, but not necessarily the method of operation of that apparatus. See MPEP 2114, incorporated here by reference. There is no "means plus function" recitation in claim 1, but rather the last two paragraphs of claim 1 amount to a vague recitation involving an in-determinant number of "flow controllers" (apparently one or more of valves 28, 44, 54, 72 and 90) and functional recitations of intended manners of operation.

In the previous office action the Examiner set forth the following warning: "In presenting this rejection the Examiner explicitly incorporated by reference MPEP 2114 and its determination of how functional language regarding intended manners of operation and intended functions are not given patentable weight in claims directed to apparatus." (Office action of 4/29/05, page 2, lines 14-16). Applicant's current response presents no arguments addressing the Examiner's interpretation of the claims and of what is stated in the MPEP, therefore the Examiner expects there will be no new arguments forthcoming given this chance to respond.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3 and 10-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The amendments made to claim 1 are confusing and contradictory. In claim 1, line 19, it is unclear which of the previously recited "first and second heat exchangers" is being referred to in the recitation "between the heat exchanger". It is also completely unclear what is meant by the recitation: "which conveys the liquid at least one of a heat transfer medium flowing through the heat exchanger [again, it is unclear whether it is the first or second heat exchanger] to and can flow selectively through the

Art Unit: 3753

heating/cooling surface and a heat transfer medium being conveyed by the heat source can flow through the heating/cooling surface". There appears to be some sort of conflict between reciting "the liquid heat transfer medium", on the one hand, and "at least one of a heat transfer medium". Are these the same thing by two different names or two different mediums? Could one of them be the "coolant" in the coolant circuit (see claim 1, line 3)? What is the significance of the "at least one of" recitation in front of "heat transfer medium"? What does "to and can flow selectively" actually mean?

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-3 and 10-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The recitation of "at least one flow controller" in the penultimate paragraph of claim 1 and the "at least flow controller" in each of the coolant and liquid heat transfer is claiming more valves in the various circuits than applicant has disclosed in the fluid flow connection depending on whether the recitation of "the heat exchanger" in claim 1, lines 19-20, is referring to the first or second heat exchanger.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Herta (2002/0100290) and Saperstein (5,265,437) and optionally Brocx (5,322,217).

Herta discloses all of the claimed features of claim 1, including a compressor 21, condenser 22, evaporator 30, a heat source 10, a heat exchanger 17, a heat/cold reservoir 33 and a heating/cooling surface 12, which heats a vehicle interior wall 37 by virtue of fan 13 blowing air through heating/cooling surface 12. Elements 12 and 17 are connected in parallel. Valve 20 controls flow of engine heat transfer medium through element 12. A circulation pump 18 is shown. A second evaporator 25 is shown.

No driver's bed heating/cooling surface is disclosed in Herta. Herta does disclose a compartment heater 12, however.

Saperstein teaches a sleeping heat exchanger 69 connected in parallel with the compartment heater 68 to permit the sleeper area to be conditioned by the circulating medium. The flow of circulating medium is controlled by a plurality of valves 70 that permit the medium to flow selectively through either heat exchanger 68, heat exchanger

Art Unit: 3753

69 or both heat exchangers 68 and 69 at the same time as disclosed in col. 7, lines 9-28, incorporated here by reference.

To have connected a driver's heat exchanger in parallel, fluidically, with respect to heater 12 of Herta using selective valving as described in Saperstein in col. 7, lines 9-28, incorporated here by reference, to permit Herta's system to comfortably condition an over-the-road truck with a sleeper compartment, by allowing the selective use of one or both heat exchangers depending on which compartment or compartments were occupied, would have been obvious to one of ordinary skill in the art.

Brocx is optionally relied upon to teach the art recognized equivalence of using a main compartment heat exchanger alone (Figure 9) and a main heat exchanger and sleeper unit connected in parallel (Figure 10) thereby reinforcing the teachings of the combination of Herta/Saperstein discussed above, if there is any question about connecting heaters for different compartments fluidically in parallel with respect to the engine coolant.

The valves disclosed by the prior art correspond in number and location to those set forth in claim 1. The fact that the references don't explicitly teach all of the modes contemplated by the functional recitations of claim 1 is of no moment since apparatus claims must distinguish structure from prior art structure based on what the apparatus **is** rather than what the apparatus **does**. See MPEP 2114.


Claims 1-3 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claims 1-3 and 10-12 above, and further in view of Baier.

To have made the rear heat exchanger of the prior art discussed above of a plate type heat exchanger to take up less room in the sleeper compartment and advantageously avoid the use of a separate fan would have been obvious to one of ordinary skill in the art.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication should be directed to John Ford at telephone number (571) 272-4911.



John K. Ford
Primary Examiner